CLAIMS

1. An optical waveguide module, comprising:

an optical circuit, constituted by a substrate and an optical waveguide formed on said substrate and having a groove formed at a predetermined inclination angle θ ($0°<\theta$) with respect to the vertical axis perpendicular to the optical axis of said optical waveguide so as to cross a predetermined portion of said optical waveguide,

a reflection filter that is installed on the inside of said groove of said optical circuit including a portion where signal light transmitted through said optical waveguide passes through, and that reflects part of said signal light according to a specific reflectivity, and

a photodetector that detects reflected light of said signal light reflected by said reflection filter, wherein

said photodetector is arranged such that said reflected light is made incident onto the light incident face thereof at a predetermined angle with respect thereto.

2. The optical waveguide module according to claim 1, wherein said optical circuit is a planar optical waveguide type optical circuit including an optical waveguide of a planar optical waveguide type

formed as said optical waveguide on said substrate.

3. The optical waveguide module according to claim 1, wherein said optical circuit is an optical circuit including optical fiber fixed as said optical waveguide on said substrate.

4. The optical waveguide module according to claim 1, further comprising a mounting member disposed on the top side of said optical circuit for mounting said photodetector on the photodetector mounting face thereof, wherein

said mounting member is disposed with said photodetector mounting face being obliquely inclined at an angle of α ($0°<\alpha<90°$) with respect to the top surface of said optical circuit such that said reflected light is made incident onto said light incident face of said photodetector at a predetermined angle.

5. The optical waveguide module according to claim 1, further comprising an optical path changing means for changing the light path of said reflected light to a light path effecting incidence onto said light incident face of said photodetector at a predetermined angle with respect thereto.

6. The optical waveguide module according to claim 5, further comprising a mounting member disposed on the top side of said optical circuit for mounting

said photodetector on the photodetector mounting face thereof, wherein

said optical path changing means is a reflection mirror formed on a predetermined face of said mounting member.

7. The optical waveguide module according to claim 6, wherein said reflection mirror is a total reflection mirror.

8. The optical waveguide module according to claim 1, wherein said photodetector is mounted on the top surface of said optical circuit, and

said light incident face of said photodetector is obliquely inclined at an angle β ($0°<\beta<90°$) with respect to the top surface of said optical circuit such that said reflected light is made incident onto it at a predetermined angle.

9. The optical waveguide module according to claim 8, wherein a light receiving portion of said photodetector is, viewed from the light path of said reflected light, disposed at a position opposite to said light incident face.

10. The optical waveguide module according to claim 1, wherein said optical circuit has N (N is a plural number) optical waveguides as said optical waveguide, and

a photodetector array having N photodetectors

corresponding to said N optical waveguides is provided as said photodetector.

11. The optical waveguide module according to claim 1, wherein a coat film for preventing the reflection of the light within a predetermined wavelength band is formed on said light incident face of said photodetector.